

ANTELOPE VALLEY AIR QUALITY MANAGEMENT DISTRICT

RULE 403.1 -- WIND ENTRAINMENT OF FUGITIVE DUST

(Adopted: 01/15/93)

(a) Purpose

The purpose of this rule is to reduce or prevent the amount of fine particulate matter (PM₁₀) entrained in the ambient air by high winds acting on anthropogenic (man-made) fugitive dust sources.

(b) Applicability

The provisions of this rule shall apply only in the Coachella Valley to any activity or man-made condition capable of generating fugitive dust, except unpaved road dust, when wind speeds exceed 25 miles per hour (mph).

(c) Definitions

- (1) ACTIVE OPERATIONS shall mean any activity capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/demolition activities, or agricultural operations.
- (2) ANEMOMETERS are devices used to measure wind speed in accordance with the specifications, and maintenance and calibration criteria specified in the District's Rule 403.1 Implementation Handbook, dated December 1992.
- (3) BULK MATERIAL is sand, gravel, soil, aggregate or other organic and inorganic particulate matter.
- (4) COACHELLA VALLEY is that portion of Riverside County defined in Rule 103, subdivision (h).
- (5) COACHELLA VALLEY BLOWSAND ZONE means the corridor of land extending two miles to either side of the centerline of the I-10 Freeway beginning at the SR-111/I-10 junction and continuing southeast to the I-10/ Jefferson Street interchange in Indio.
- (6) CONSTRUCTION/DEMOLITION ACTIVITIES are any on-site mechanical activities preparatory to or related to the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities; grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.

- (7) **DISTURBED SURFACE AREA** means a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust. This definition excludes those areas restored to a natural state, such that vegetative ground cover and soil characteristics are similar to adjacent or near-by natural conditions.
- (8) **DUST SUPPRESSANTS** are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive emissions. Non-toxic chemical stabilizers must not be used if prohibited by the Regional Water Quality Control Boards, the California Air Resources Board, the Environmental Protection Agency, or any other applicable law, rule or regulation; and should meet any specifications, criteria, or tests required by any federal, state, or local water agency.
- (9) **EARTH-MOVING ACTIVITIES** shall include, but not be limited to, such operations as grading, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, landfill operations, soil mulching, or agricultural tilling.
- (10) **FUGITIVE DUST** means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of man.
- (11) **NON-ROUTINE** means any non-periodic active operation which occurs no more than three times per year, lasts less than 30 cumulative days per year, and is scheduled less than 30 days in advance.
- (12) **ON-SITE** means within the property lines, or as otherwise approved by the Executive Officer.
- (13) **OPEN STORAGE PILE** is any accumulation of bulk material with 5 percent or greater silt content which is not fully enclosed, covered, or chemically stabilized, and which attains a height of three feet or greater and a surface area of 150 or more square feet. Silt content level is assumed to be 5 percent or greater unless a person can show, by sampling and analysis in accordance with ASTM Method C-136, that the silt content is less than 5 percent. The results of ASTM Method C-136 are valid for 60 days from the date the sample was taken.
- (14) **PARTICULATE MATTER** means any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.
- (15) **PM₁₀** is particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable State and Federal reference test methods.

- (16) PROPERTY LINE means the boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.
- (17) SILT means any aggregate material with a particle size less than 75 micrometers in diameter as measured by a No. 200 Sieve.
- (18) STABILIZED SURFACE means any previously disturbed surface area which, through the application of dust suppressants, shows visual or other evidence of surface crusting.
- (19) UNPAVED ROAD DUST means fugitive dust caused by vehicles traveling on unpaved roads.
- (20) UNPAVED ROADS are any earthen roadways not covered by concrete, asphaltic concrete, or asphalt.
- (21) WIND-DRIVEN FUGITIVE DUST means visible emissions from any disturbed surface area which is generated by wind action alone.
- (22) WIND GUST is the maximum instantaneous wind speed as measured by an anemometer.

(d) Requirements

- (1) Any person subject to Rule 403, and who is responsible for any active operation, open storage pile, or disturbed surface area, and who seeks an exemption pursuant to Rule 403, subparagraph (g)(2)(A) shall be required to determine when wind speed conditions exceed 25 miles per hour. The wind speed determination shall be based on either District forecasts or through use of an on-site anemometer as described in subdivision (e).
- (2) Any person involved in active operations in the Coachella Valley Blowsand Zone shall stabilize new man-made deposits of bulk material within 24 hours of making such bulk material deposits. Stabilization procedures shall include one or more of the following:
 - (A) Application of water to at least 70 percent of the surface area of such bulk material deposits at least three times per day when there is evidence of wind driven fugitive dust;
 - (B) Application of chemical dust suppressants in sufficient concentration so as to maintain a stabilized surface for a period of at least six months;

- (C) Installation of wind breaks of such design so as to reduce maximum wind gusts to less than 25 miles per hour in the area of the bulk material deposits.
- (3) A person shall take the action or actions specified in Rule 403, Table 2 for "Inactive Disturbed Surface Areas" to minimize wind driven fugitive dust from disturbed surface areas at such time when active operations have ceased for a period of at least 30 days.
- (4) Any person involved in agricultural tilling or soil mulching activities shall cease such activities when wind speeds exceed 25 miles per hour. The wind speed determination shall be based on either District forecasts or through use of an on-site anemometers as described in subdivision (e).

(e) Implementation Requirements

- (1) The determination of wind speed conditions in excess of 25 miles per hour, as specified in paragraphs (d)(1) and (d)(4), shall be based on the following criteria:
 - (A) For facilities with an on-site anemometer:
 - (i) When the on-site anemometer registers at least two wind gusts in excess of 25 miles per hour within a consecutive 30-minute period. Wind speeds shall be deemed to be below 25 miles per hour if there is no recurring wind gust in excess of 25 miles per hour within a consecutive 30-minute period; OR
 - (B) For facilities without an on-site anemometer:
 - (i) When wind speeds in excess of 25 miles per hour are forecast to occur in the Coachella Valley for that day. This condition shall apply to the full calendar day for which the forecast is valid. (The Executive Officer shall determine meteorological conditions which will cause wind speeds in excess of 25 miles per hour, and shall issue daily forecasts of expected wind conditions. Such forecasts shall be maintained at District Headquarters and shall be available to the public;) OR
 - (ii) When wind speeds in excess of 25 miles per hour are not forecast to occur by the District, and fugitive dust emissions are visible for a distance of at least 100 feet from the origin of such emissions, and there is visible evidence of wind driven fugitive dust.

- (2) Any person who elects to install an on-site anemometer shall:
 - (A) Notify the Executive Officer no more than 10 days after installing such equipment. The notification shall contain, at a minimum, the person's name, address, telephone number, description of the operation(s), and first day of operation, as specified in the District's Rule 403.1 Implementation Handbook, dated December 1992.
 - (B) Be subject to the provisions of subparagraph (e)(1)(B) for wind speed determinations if equipment outages, malfunctions, or invalid data exceed one hour during active operations on a calendar day.

(f) Recordkeeping

- (1) A person subject to the provisions of this rule shall compile written daily records. Such records shall be submitted to the Executive Officer no more than 60 days after the termination date of any active operation, or for ongoing active operations, shall be retained for not less than one year and shall be made available to the Executive Officer upon request. Such records shall contain:
 - (A) Name, address and phone number of owner/operator;
 - (B) Dates of active operations;
 - (C) Site location;
 - (D) Type of operation or activity.
- (2) In addition to the provisions of paragraph (f)(1), any person who elects to install an on-site anemometer shall also compile written records, subject to the same recordkeeping requirements as paragraph (f)(1). Such records shall contain:
 - (A) Location, vendor, model, and serial number of the anemometer;
 - (B) The time of occurrence of any wind gust in excess of 25 miles per hour during hours of active operations;
 - (C) The actions taken to comply with the provisions of paragraphs (d)(4) and (h)(4), as applicable.

(g) Compliance Schedule

The provisions of this rule shall become effective on March 1, 1993.

(h) Exemptions

- (1) The provisions of this rule shall not apply to ceased or inactive mining operations subject to the requirements of the Surface Mining and Recovery Act (SMARA) of 1975, provided that the provisions of the SMARA Reclamation Plan are implemented by the owner and are at least as stringent as those contained in this rule;
- (2) The provisions of paragraphs (d)(2) and (d)(3) shall not apply to:
 - (A) Any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigative actions are in conflict with the Endangered Species Act;
 - (B) Any disturbed surface areas or bulk material deposits with a surface area less than 2,500 square feet;
 - (C) Non-routine or emergency maintenance of flood control channels and water spreading basins.
- (3) The provisions of paragraph (d)(3) shall not apply to agricultural parcels which are in compliance with provisions of the Food Security Act of 1985 for highly erodible soils, or which do not contain highly erodible soils, as determined by the U.S. Soil Conservation Service.
- (4) The provisions of paragraph (d)(4) shall not apply to:
 - (A) Agricultural tilling activities or soil mulching activities under the following conditions:
 - (i) If the prohibitory requirements of this Rule have occurred during six or more hours of active operations on each of two previous consecutive days, then a one-day exemption will be allowed. (These activities would again be subject to the prohibitory requirements of this Rule following this one day exemption.)
 - (ii) If the prohibitory requirements of this Rule have occurred during sixty or more cumulative hours of active operations within a calendar month, then an exemption will be allowed for the remainder of the calendar month. (These activities would again be subject to the prohibitory requirements of this Rule at the start of the following month.)
 - (iii) During periods of precipitation.

- (B) Agricultural tilling activities which result in a net reduction of wind driven fugitive dust. (This exemption is applicable only if wind driven fugitive dust is not visible from tilled soil, but is visible from untilled soil within the same agricultural parcel.)

[SIP: Submitted as amended 1/15/93 on 11/18/93]

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